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ABSTRACT

In Saskatchewan, a growing number of schools contain split-grade or multi-grade classrooms. This resource is designed to help teachers develop a vision of how successful teaching and learning can occur in multi-level classrooms. It provides teachers with practical applications that support an environment that is learner-centered. The first four sections define multi-level classrooms; discuss the keys to teaching success; address opportunities and challenges; and look at the classroom as a community of learners. The last sections focus on curriculum and instruction, timetabling, and assessment. The section on curriculum and instruction discusses curriculum mapping, thematic teaching, independent study, peer tutoring, experiential learning, and other topics. It also examines effective ways to ensure that students achieve objectives in required areas of study. Goals for English language arts, mathematics, science, social studies, arts education, physical education, and health are presented. Continuous, ongoing assessment is essential in any classroom. Techniques that are representative ways to conduct effective evaluation and assessment in a multi-level classroom are summarized. Approaches to authentic assessment are also discussed, including the use of rubrics. Practical examples are included in each section. Multi-level resources available from the Stewart Resources Centre in Saskatoon are listed. (Contains 32 references.) (CDS)

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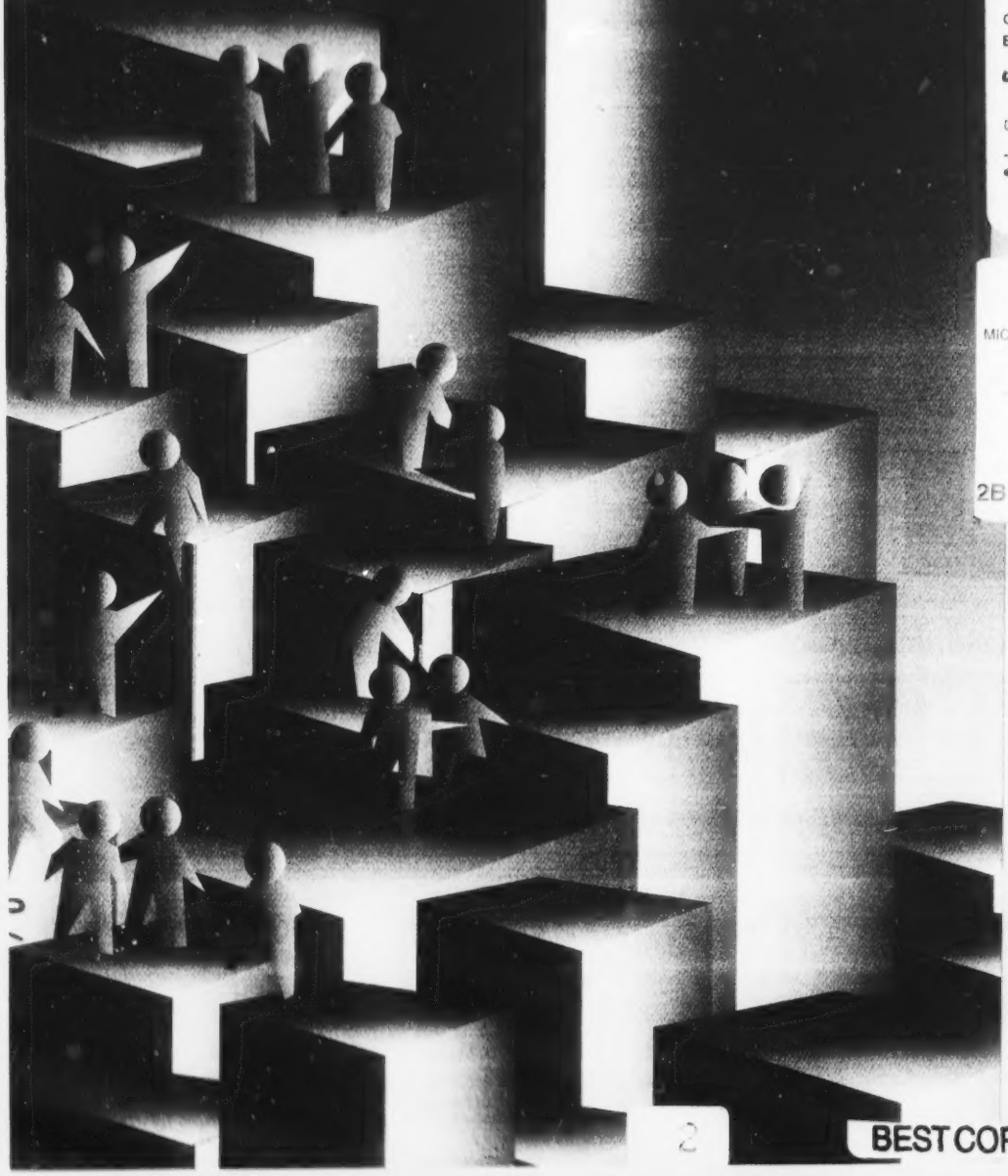
LEARNING TOGETHER in Multi-level Classrooms



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Foreword

Learning Together in Multi-level Classrooms examines a topic of interest to many educators as we move from a paradigm of "single classroom-single grade" and recognize the many levels within every classroom.

This resource brings theory, practical ideas and the voices of multi-level teachers together in a thoughtful, useful way.

We hope you enjoy working with this resource. Your comments are always appreciated.

Gwen Dueck
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Caroline Krentz
Director, SIDRU

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Saskatchewan Professional Development Unit
and the
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Introduction

In the early days of education in Saskatchewan, multi-level grouping was a necessity. The one-room school housed a multi-level group. Students of all ages came to school together, played together and learned together. People have looked back to the one-room school remembering the rich learning experiences and close contact with others that it offered, perhaps forgetting its physical shortcomings. Several decades later, due to the sudden and sharp drop in the birth rate, signaling the end of the post-war "baby boom" and the shift in population from rural to urban Saskatchewan, many schools are faced with the reality of the multi-level classroom. Recent statistics from Saskatchewan Education confirm that there are a growing number of multi-level classes in Saskatchewan schools.

The most common type of classroom organization is two grades in one classroom (often referred to as "split grades"); however, there are several rural Saskatchewan schools with classrooms that have more than two grades.

Educators at all levels have come to realize that, in any classroom, regardless of how many or how few grades it houses, students have more differences than similarities. Our world has become more diverse and there is a growing expectation that our classrooms respect, value, and address the needs of all students. For these reasons it is important to explore curriculum and instruction structures that focus on accommodating a wide range of learners in all classrooms.

How this resource is organized

Teachers in multi-level classrooms face many of the same challenges all teachers face. They figure out how to put all the pieces together. They want a clear sense of where they want to go and how they are going to get there. This resource is designed to help teachers develop a vision of how successful teaching and learning can occur in multi-level classrooms. It provides teachers with practical applications that support an environment that is learner-centered, to challenge teachers to examine their assumptions and beliefs, and to respect and empower members of the learning community.

This resource is organized in several sections. The first four sections:

- define multi-level classrooms,
- discuss the keys to success,
- address the opportunities and challenges, and
- look at the classroom as a community of learners.

The last sections focus on:

- curriculum and instruction,
- timetabling, and
- assessment.

***The Saskatchewan Indicators - Update* (1996) shows the percentage of teachers working in split or multi-level situations.**

Provincial Language Arts Learning Assessment	
Grade 5 Teachers	46.9%
Grade 8 Teachers	13.6%
Provincial Mathematics Assessment	
Grade 5 Teachers	42.9%
Grade 8 Teachers	15.1%
Health Education, 7,8 & 9 Curriculum Evaluation Project	
Grade 7, 8 & 9 Teachers	30.0%

The content of this resource is research-based and is intended to support teachers by offering practical suggestions for teaching and learning in a multi-level classroom.

Teachers' stories ground the content in living classroom experiences.

Throughout *Learning Together* we have referred to documents in the *Instructional Strategies Series* and the *Diversity in the Classroom Series*. We chose to do this rather than duplicating the material here. We hope this is helpful to you. These documents are listed for you on page 53.

Along the way you will find "Notes to Myself" — opportunities for reflection and making notes for future reference.

This resource invites you to examine your assumptions and beliefs about multi-level teaching and takes you on an adventure as you contemplate how you will create a community of learners in your multi-level classroom.

In four years of full-time teaching in a rural Saskatchewan school, my assignment was grades 4-6 for the first two years, grades 6-9 plus principalship in my third year, and finally grades 5-7 plus principalship in my fourth year. Multi-grade arrangements were necessary—as this rural school had a low enrollment. Depending on the year, class sizes ranged from thirteen to twenty-three.

If you want to know more:

How "multi-level classroom" is defined,
turn to page 7

Keys to Success,
turn to page 8

Opportunities and Challenges,
turn to page 11

A Community of Learners,
turn to page 14

Curriculum and Instruction,
turn to page 17

Timetabling,
turn to page 43

Assessment,
turn to page 45

Note: Unlike some other Choose-Your-Own-Adventures, this one can also be read straight through.

"On your way"

There are several different ways to create a community of learners in your multi-level classroom. This resource is designed to support you as a teacher as you reflect upon:

- your teaching practices
- the way you do things in your classroom
- your traditional notions of teaching
- your philosophy of education

As you engage in the reflective process about multi-level teaching we invite you to consider:

- how you will get started if you have never taught a multi-level class.
- how you will use the curriculum guides to provide learning opportunities for multi-level students.
- what instructional approaches create a community of learners.
- the roles and responsibilities of all members of the learning community.
- what you believe about teaching and learning.
- how you might meet all of the objectives for each grade level.
- how you will assess your students.

Defining Multi-level Classrooms

Often the following terms are used synonymously:

- multi-grade
- non-graded
- multi-level
- split grades
- blended grades
- vertical grouping
- family grouping
- multi-age grouping

Researchers and educators offer several definitions of the term.

For the purposes of this resource, the term "multi-level" will be used, and is defined as:

any classroom organizational structure which includes more than one grade and includes students of various ages.

Multi-level instruction:

- eliminates grade levels to some extent,
- promotes flexible grouping and continuous progress, and
- permits the use of meaningful individualized instruction.

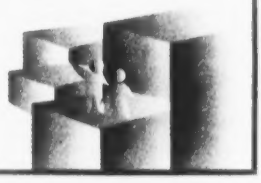
I loved teaching in that rural school. The small school and combined grades provided a family type of atmosphere. I taught some students four years in a row, and others for three years. During that time I really got to know and love my students. I probably spent more time with them than my own children. I was able to help students not only academically, but emotionally and socially as well. Spending as much time as I did with them enabled me to understand them and to know how to motivate most of them. I knew what they liked and what they disliked. They in turn got to know me. They knew what my expectations were. They knew where I was coming from and they loved me back even on the bad days.

Notes to Myself

Developing an analogy for the multi-level classroom.

A multi-level classroom is like . . .

because . . .



Keys to Success in Multi-Level Teaching

What do we believe about teaching and learning?

Multi-level classrooms are more than just a way of organizing; they reflect a teacher's knowledge of how students learn and how to teach. Teachers in multi-level classrooms, supported by an understanding of recent research in the areas of student development and learning theory, come to believe that students of different ages can:

- learn together,
- help each other, and
- be responsible for much of their own learning.

A number of considerations contribute to success in multi-level classes. Based on what we know and believe about teaching and learning, we present the following elements that contribute to quality learning. Initially, you may wish to focus on those you feel are most significant for the classroom.

1. Holistic learning
Multi-level teachers consider the students' social, physical, emotional, aesthetic, spiritual, and cognitive development. All learning domains are important in order for students to acquire a well-balanced education.

2. Empowering students
Creating a learning community in which students and teachers share roles is the basis of multi-level teaching. However, students are empowered when teachers encourage them to be independent learners, assist fellow students by accepting the role of teacher, and are an integral part of group meetings.

3. Process learning
How students learn, the questions they ask, the way they solve problems, and their thinking development are of prime importance. The process of learning should include freedom to experiment, active participation by students, and materials suited to their level of development.

A multi-level program is structured to closely resemble a real community. Children learn from a variety of sources - teachers, other adults, and each other. Individuals of different ages, backgrounds, abilities, and needs come together to create an environment where all have input and share responsibilities.

(Maeda, 1994, p. 4-5)

4. Integration
Integration of subject matter eliminates the artificial barriers between subjects. It also enables students to learn and teachers to teach in an environment where topics are explored across age levels while addressing the objectives of several grade levels in more than one subject area.

5. Real-life experiences
The school, the home, and the community are used to enrich the curriculum and provide real-life experiences for students. Students of different age groups go on field trips together. They do homework which connects what they do at school to things their families do at home.

6. Resource-based learning
Resource-based learning is an approach to curriculum that encourages students to use all types of resources including the use of community resource people. It is student-centered and offers opportunities to choose, explore, and discover. When students make choices in an environment rich in resources, their thoughts and feelings are respected and they are well on their way to becoming autonomous learners.

7. Mobility
The multi-level classroom is organized to encourage movement. Students are not

confined to desks for much of their learning time. They choose to work anywhere in the classroom provided they are not disturbing others' learning. They are encouraged to use the resource center and to use the out of doors when appropriate.

8. Flexible grouping
Grouping in multi-levels can be determined in a number of ways. Teachers may use direct instruction with individuals or small groups based on need. Grouping can also be done based on interest. Whole group teaching can be used for particular concepts or topics followed by differentiated activities or assignments.

9. Collaboration
Collaboration and cooperation are integral parts of a multi-level class. A multi-level team includes: students, teachers, parents, paraprofessionals, and librarians.

10. Developmental curriculum
A developmental curriculum allows students to construct their own knowledge at their own pace. It enables students to learn and interact with students of different ages and abilities.

11. Shared decision making
Shared decision making means that teachers operate a consensus classroom. Making decisions about rules, consequences, and problem solving save time later on. Daily meetings help build and maintain a sense of community.

The multi-level classroom contains groups of students of various ages working and playing together and learning from one another as well as from their own endeavors. It is a mixed-aged classroom with a multitude of abilities, talents, and learning styles where all learners develop a respect for the diversity of others.

(Fogarty, 1993)

12. Risk taking
When teachers create a non-threatening, comfortable learning environment, students take risks and construct much of their own learning by exploring materials, interacting with others, and drawing on their backgrounds to make connections to new knowledge.

13. Parent involvement
The link between the home and the school helps students connect what they learn in school to the real world. When parents support and help the teacher, students maintain positive attitudes towards school. Authentic parental involvement means that parents are involved in teaching, evaluating and planning the school program.

14. Learning styles and modalities
Classrooms and learning activities can be organized to accommodate a variety of learning styles. This classroom organization expands students' ways of learning and provides a variety of opportunities to demonstrate their learning.

15. Continuous progress
Students help plan their learning and help determine when they are ready to move on to the next stage. They often participate in activities that are beyond the grade level to which they are assigned.

16. Choice
At times students are able to choose whether they want to work alone, in a pair or in a group. Depending on their preferred learning style, students are allowed to make decisions about how they will approach certain learning tasks. Giving students choices broadens their abilities to learn and to demonstrate their learning in different ways while providing practice in decision making. We only learn how to make responsible decisions by making them.

These elements support the idea that learning occurs in a holistic way; that is, learning involves "big ideas" rather than minute details and facts. The concepts involve the learner in critical thinking, questioning, and understanding.

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Notes to Myself

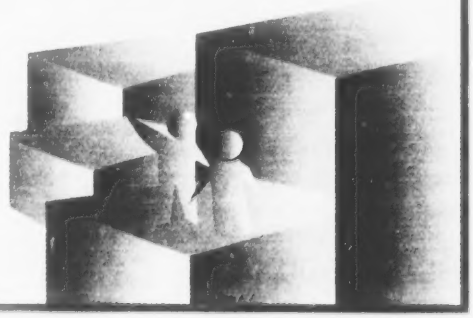
I already incorporate . . .

- ❒ Holistic learning
- ❒ Empowering students
- ❒ Process learning
- ❒ Integration
- ❒ Real-life experiences
- ❒ Resource-based learning
- ❒ Mobility
- ❒ Flexible grouping
- ❒ Collaboration
- ❒ Developmental Curriculum
- ❒ Shared decision making
- ❒ Risk taking
- ❒ Parent involvement
- ❒ Learning styles and modalities
- ❒ Continuous progress
- ❒ Choice

I would like to incorporate . . .

- ❒ Holistic learning
- ❒ Empowering students
- ❒ Process learning
- ❒ Integration
- ❒ Real-life experiences
- ❒ Resource-based learning
- ❒ Mobility
- ❒ Flexible grouping
- ❒ Collaboration
- ❒ Developmental Curriculum
- ❒ Shared decision making
- ❒ Risk taking
- ❒ Parent involvement
- ❒ Learning styles and modalities
- ❒ Continuous progress
- ❒ Choice

I have questions about . . .



Opportunities and Challenges in the Multi-level Classroom

Multi-Levels—Opportunities

Multi-level grouping is probably the most life-like way of organizing students for formal learning. Its structure closely resembles a real community. Often family members learn together as a natural extension of the family unit. A multi-level program is based around the philosophy of a developmental curriculum that encourages and expects students to learn at their own rate and level. It has the following built-in advantages for teachers and students:

- It places a major emphasis on helping students become **self-directed** and **self-disciplined**. It is based on trust in students to take responsibility for much of their own learning. There tends to be a greater degree of independence and individual initiative on the part of the teacher and the students in the class.

- It enables the school to become **more life-like** in providing for educational opportunities. The great diversity of age levels serves to shape many aspects of student's personalities. An older student learns to teach, to lead, to be patient and understanding, to have compassion for those less able. Younger students admire someone older whose world is broader.

- It gives students a **sense of security**. Older students gain confidence from contact with younger ones. They see themselves at less mature stages through which they have recently passed. Younger students also experience a sense of security because often when they begin school there is an older brother, sister or neighbor in the same class. Discipline problems within the group tend to diminish.

- It more readily provides for **individual differences**. The learning process will be more enriched by a greater heterogeneity of pupils. The essential environment is difference rather than similarity and emotional strain is often reduced which translates into more favorable attitudes towards school and instruction.

- It allows brighter students to demonstrate greater academic gains because of the opportunities to extend instruction beyond their grade level. Multi-level classrooms support students who experience learning spurts by making **accommodations for enrichment, acceleration, and pacing**.

- It tends to improve **home and school cooperation**. Because students have the same teacher for longer periods of time, parents and teachers have a better opportunity to get to know and understand each other.

- It encourages teachers to **grow professionally**. Multi-level

In early November, our school was preparing for our Remembrance Day program. I was video-taping my students' responses to a Remembrance Day question I had posed. I was rather involved in completing the project in our school office and lost track of time. I had a friendly reminder pass outside my office door. Johnny, a grade five student, announced to his grades 1-5 classmates - Okay everyone, it is class change, time for math. Get out your math books and get to work. A few minutes later, I walked into the classroom to find all of my students at work. A grade 2 student was helping a grade 1 student and a grade 5 student was helping a grade 3 student. A common occurrence in a multi-level school.

classrooms tend to provide better climates for learning and a greater variety of effective methods and instructional approaches. Teachers learn to work co-operatively with aides, volunteers and parents.

Multi-level Classrooms Offer Opportunities for:

- self-discipline
- self-direction
- independent learning
- support
- cooperation
- life-like learning
- a sense of security
- individualization
- diversity
- favorable academic achievement
- positive attitudes
- professional growth

What Are The Challenges?

Multi-level classes create challenges for some teachers and parents. Arguments against having more than one grade in a classroom might range from philosophy of education to the work load of the teacher.

- Some teachers are not ready to accept the philosophy under which a multi-level class best operates. Even for those who can envision the philosophy of open education, old habits make it difficult to adjust to **new demands.**
- In schools where a student may spend two or more years with the same teacher and **personality conflicts** occur the challenge of resolution may be significant.
- Some educators express concern for the **adjustment of students** who move from a multi-level class to a single grade class.
- Most **parents** have been conditioned to having their children in a single grade classroom. Some parents feel that if their child is at a higher level than most for his/her age that s/he may not be stretched because of the age range in the classroom. Others feel that content may be too difficult for students at lower levels.
- Some parents may feel their child is doing the teacher's job by helping younger students.
- A multi-level class may be **more physically tiring** for the teacher whose role is to act as a facilitator and as a guide for each individual. Some teachers believe that planning for a multi-level class requires more work.
- **Classroom management** problems may be greater because of the wide range of academic and emotional levels in one classroom.
- Sometimes resentments between families influence the atmosphere in the multi-level classroom. Students of different age levels and **siblings in the same classroom** sometimes cause intimidation.
- Some parents feel that **development of friendships** is hampered in a multi-level class that has a wide range of age groups. However, one multi-level teacher claims: Teachers in multi-level classes become aware of problems that may arise, are prepared to face them positively, and cooperate with others to solve them in everyone's best interests. They know they can consult with colleagues, administrators, parents, and other support personnel to problem solve.

I teach in a middle cluster in an inner-city school. About five years ago the staff at my school, along with the school board, decided that some changes needed to be made to better meet the needs of the students and the community. One of the changes was to organize classes into clusters. The primary cluster consists of grades 1 and 2, the middle cluster grades 3, 4 and 5, and the senior cluster grades 6, 7, and 8. The thinking behind this was that in order to keep students in school it was felt that they would have a better support system with siblings or relatives in the same classroom. As well, parents and teachers would build a long-term relationship since their children would be with one teacher for three years.

Resource-based learning, with its flexibility and adaptability to the learner's needs, is an excellent choice for teachers in the regular or multi-level classroom. The most successful resource-based unit I've done to date involved the grade three classroom learning about the solar system and the grade 6 room studying space travel. The learning and enthusiasm that were captured were hard to match.

Multi-level classroom challenges:

- new or different demands
- more planning
- personality conflicts
- parent resistance

What do you see in the diagram below?

In a multi-level classroom, do you see an opportunity or a challenge? — or both?

Did you see a bird or a question mark? or both?

Notes to Myself

How do I address . . .

- personality conflicts?
- different developmental levels?
- questions from parents?
- my own beliefs about teaching and learning?
- classroom management?
- my concern for work load?
- differences between families?

The Classroom — A Community of Learners

The teacher brings:

- knowledge of the student
- knowledge of pedagogy, curriculum, and resources
- previous experience
- repertoire of instructional methods
- culture and language
- varied interests

The student brings:

- culture and language
- previous experience
- backgrc and knowledge
- varied interests
- curiosity
- an ability to learn

Learning Environment

Challenging
Supportive
Stimulating
Resource Based
Flexible
Equitable
Open
Accepting
Freeing
Respectful
Encouraging

Teachers

- model
- observe
- facilitate
- challenge
- encourage
- adapt
- support
- reflect
- practice

Learn
Plan
Take Risks
Make Decisions
Collaborate
Communicate
Think
Evaluate

Students

- inquire
- research
- experiment
- predict
- interpret
- problem-solve
- seek meaning

Adapted from English Language Arts Curriculum Guide (1992)
Saskatchewan Education, Training and Employment

Roles and Responsibilities in a Community of Learners

Everyone involved with the school, including administrators, teachers, students, aides, parents, and community play important roles in the smooth and successful operation of the multi-level class. The goal is to create a safe, positive learning community.

What does the Director of Education do?

- Provides instructional leadership
- Seeks to help and enable
- Involves and empowers
- Encourages creative action and risk taking
- Serves as a professional advocate
- Serves as a mediator of cultural and social diversity
- Provides for a healthy work environment
- Supports networking
- Solicits funds for resources

What does the Principal do?

- Guides discussion
- Provides opportunity for professional development
- Supports the teacher, students, and parents
- Encourages risk taking
- Provides educational leadership
- Sets the tone of the school
- Accepts change enthusiastically but carefully
- Chooses a staff carefully
- Values multi-level teaching and learning

What does the Teacher do?

- Creates a positive learning environment
- Provides a wide range of learning experiences
- Provides leadership in the classroom
- Helps set classroom guidelines

I often have students work on various inquiry projects at their own level and the students' enthusiasm is contagious. The rewards are tremendous. I can really see growth in each student over the span of many years. In the classroom setting students learn to be responsible and accountable for much of their learning. They learn to be independent learners because I am not always available exactly when they want me. They learn to help each other and peer teach if necessary. The older students are able to help out the younger students and the younger students teach the older students a lot, especially about patience and understanding. Everyone in the class looks out for each other.

- Works, plays, and learns with students
- Builds strong home - school relationships
- Develops short- and long-range plans
- Diagnoses student needs
- Encourages student interaction and peer teaching
- Communicates with parents
- Evaluates students

What does the Student do?

- Works independently
- Helps other students
- Cooperates as a member of the group
- Sometimes assumes the role of teacher
- Self-evaluates
- Keeps records of progress
- Communicates with parents
- Assists with setting classroom standards and behavior guidelines

What does the Teacher Assistant do?

- Assists teachers to individualize instruction
- Frees the teacher from time consuming jobs
- Assists with library duties
- Helps decorate the class and display student work

What do Parents do?

- Support and help the teacher and the children
- Enrich the curriculum by sharing knowledge and talents
- Communicate with the teacher and the children
- Help to turn homework into home learning

I have developed a positive relationship with the parents in my room. These are parents who were reluctant to come into the school and did not feel as though they had any control over or input into their child's education. As parents get to know the teacher over a three-year period they are more likely to come to school and communicate with the teacher.

The separation between grades in my mind does not exist. I think of my room as middle cluster rather than grades 3, 4, and 5. This must have rubbed off on one of my students as I overheard this conversation with one of my students and a visitor to the school. The student was asked what grade he was in and he replied "I'm in middle cluster."

Nurturing a Learning Community

1. **Building Community during the first two weeks:**
- Use trust activities and co-operative games
- Develop a common vision out of everyone's individual goals
- Talk to students about learning in a multi-level class
- Establish guidelines - elect to live by do's and don'ts
- Assign a home desk for storage
- Begin a buddy system
- Decide as a group how to arrange the room
- Determine approaches to homework
- Talk about what they are learning and wondering about to their parents/caregivers

2. **Instructional Approaches**

Begin the year:
- with more structured approaches
- by using specific tasks
- being organized around centers or stations
- practicing cooperative learning
- increasing the use of hands-on interactive material.
- encouraging student reflection and feedback
- designing learning activities that are:
  - independent
  - open-ended
  - student directed
  - intended for sharing, and
  - learning with others

3. **Organizing the Curriculum**

Begin to think about ways to "unbuckle" the traditional curriculum. Use:
- curriculum mapping
- curriculum compacting
- integration of Required Areas of Study
- integration across grade levels
- curriculum guides and begin by focusing on the objectives and determine with students appropriate topics or themes

4. **Assessment**
- Begin by observing and recording student's work
- Teach students to self-evaluate and keep records
- Decide how to report to parents
- Use a variety of strategies and offer choices for learning

5. **Management Strategies**

Focus on ways to enable students to assume responsibility for their behavior.
- Set classroom rules and ground rules for class meetings together
- Determine ways to support behavior
- Determine classroom responsibilities
- Decide how to resolve disputes

Curriculum and Instruction

To enable teachers to provide for diversity in classrooms, the provincial curricula encourages the development of lessons and units based on students' needs and interests, and community resources to achieve the objectives. Although it is not possible to have a tailor-made program for every student, it should be possible to have an adaptable, flexible basis for the curriculum so that certain aspects of cultural background, the nature of the student's community, and differing current interests and needs are recognized.

Teachers working with multi-level groups know that selective use of curricular content is essential. After diagnosing student needs teachers develop a program with a variety of instructional approaches, determine required objectives, and build on sample units and core units provided in curriculum guides to integrate across subject areas and grade levels.

Organizing Instruction

Multi-level teachers organize instruction in different ways at different times. For example, sometimes they:

- Teach each grade separately
- Teach the whole class and students contribute at their own level
- Organize students into multi-level small groups to have them focus on a problem
- Focus on materials and provide activities that accommodate several levels of learning
- Use thematic or topic teaching that integrates a number of subject areas and levels
- Implement curriculum compacting by giving students credit for what they already know and freeing up time to offer enrichment or acceleration options

A lot of individualization needs to take place in any classroom, but especially in a multi-age setting. Students are taught according to their needs and the grade that each child is in is not an issue. Certainly the foundational objectives at each grade are important but the content areas often span many grades and ages.

Curriculum Mapping

Curriculum mapping is useful to meet objectives. Objectives and sample units from different curricula are combined by choosing topics that spiral through the grades, and are integrated across required areas of study. In Saskatchewan curriculum guides there are a number of areas that facilitate curriculum mapping. For example . . .

- "Animals" is a core unit in Grade 1 Science, a sample unit in Grade 1 English Language Arts, a core unit in Grade 3 Science, a model unit in Grade 3 Math, and "The Buffalo" is a Grade 4 unit in the Indian and Metis Math Units.
- "Weather" is a core unit in Grade 2 Science and a sample unit in Grade 2 English Language Arts. Time, Seasons, and Temperature is a Grade 2 unit in the Indian and Metis Math Units and is a topic in the Social Studies unit on Identity in Grade 2.
- "Me" is a model unit in Grade 1 Math, "All About Me" is a sample unit in Grade 2 English Language Arts, "Friends and Friendships" is a sample unit in Grade 2 English Language Arts, and "Friendship" is a model unit in Grade 5 Math.
- "Sharing our World" and "Glimpses of Other Worlds" are Grade 4 and 5 units in English Language Arts, "Saskatchewan Identity" and "Canadian Identity" are

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Grade 4 and 5 units in Social Studies, "Indian and Metis Heritage" is a unit in the Indian and Metis Math Units.

Content areas of the Saskatchewan curriculum are grouped by large themes and then explored by the whole class in what we call learning families.

Teaching three and four grade/age levels at a time certainly made me a better teacher. Organizational skills were crucial and classroom management with a variety of ages and emotional levels was a continuous learning experience. I had to develop a large repertoire of teaching strategies as the same students would get bored after four years of the same thing. I used curriculum compacting as a way of shortening the curriculum and teaching only what the students did not know. I used enrichment centers within the classroom as a means to enrich the learning of all students. I had activities set up around the room so that students with free time had educational and motivating projects to work on.

Seven Ways to Learn Anything

(based on Howard Gardner's **Multiple Intelligences**)

When students are learning a new concept, skill, or task, try linking what they are learning to as many different intelligences as possible. As a general rule of thumb, take the information to be learned and:

1. Talk, read, or write about it (linguistic approach);
2. Draw, sketch, or visualize it (spatial approach);
3. Dance it, build a model of it, or find some other hands-on activity related to it (bodily-kinesthetic approach);
4. Sing it, chant it, find music that illustrates it, or put on background music while learning it (musical approach);
5. Relate it to a personal feeling or inner experience (intrapersonal approach);
6. Conceptualize it, quantify it, or think critically about it (logical-mathematical approach); or
7. Work on it with another person or group of people (interpersonal approach).

Instructional Approaches

Teachers in multi-level classrooms expand their notion of instruction. They provide opportunities for students to learn about the area of study and to learn through the area of study. Students learn about the area of study through instructional approaches that demonstrate, model, and provide activities. They learn through the area of study by having opportunities to construct knowledge and use skills and processes by conversing, thinking, writing, talking, constructing, computing, creating, building, and experimenting (Politano & Davies, 1994). Teachers choose approaches that provide choice, invite active participation, and provide for diversity.

To provide for student diversity in multi-level classes teachers choose a variety of instructional methods. It is impossible to establish a system of teaching that teaches the same things at the same time to 25 or 30 students, even in a single grade classroom. For this reason teachers focus on instructional methods that allow students at different levels to learn together, in different ways at some times and independently at others. They use resource-based learning as a key ingredient in every instructional approach. Approaches that support the philosophy of multi-level grouping are addressed in this section.

- Thematic Teaching
- Learning Centers
- Whole Group Teaching
- Small Group Teaching
- Independent Study
- Individualized Instruction
- Peer Tutoring
- Play - Debrief - Replay
- Cooperative Learning
- Experiential Learning

When I first considered the immense task of teaching in a multi-level classroom, my most pressing question was - "How would I manage all the learning needs of all the grades?" That is still a significant question, but here are some answers. I organize my learning activities so that parents and students can act as teachers and small group facilitators. I use instructional strategies that are self-directed. These include literature circles, student responsibility for centers and classroom flow, self-regulating math activities, and check lists.

Each year the staff chooses themes that will be taught school-wide throughout the year. There are two other middle cluster teachers as well as a teacher aide, a resource room teacher and teacher librarian who collaborate on literature-based units. There are at least five people working on one unit that is taught in all three middle cluster rooms. We meet once a week to plan units, field trips, fund raising, and all other things that affect our cluster.

When I talked to another teacher who had taught in a multi-level classroom for seventeen years she said, "Teaching in a multi-level classroom is the best adult education program you can find." I not only agree, but I know that my skills and understanding as an educator and as a human being have multiplied exponentially with increasing experience. I work hard and put in long hours, but what I am learning and the ways in which I am growing go far beyond professional expectations. Our classroom is seldom orderly and quiet but it is always vital and fascinating.

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1. Thematic Teaching

The major aim of thematic teaching in a multi-level class is to encourage students to acquire a wide range of knowledge concerning a particular topic. Thematic teaching is organized by teachers, students, and parents in a cooperative way. Themes that address curriculum requirements at each level in the classroom and integrate a number of subject areas may be chosen by the teacher. Other themes are chosen by the students based on their interests. Once a topic is chosen the following steps are followed:

- The teacher, students, and parents do initial preparation such as gathering materials and learning resources.
- They decide how the topic will be approached. A plan is set out.
- The topic is introduced to the class.
- Learning strategies and student activities are decided.
- How students will research the topic is discussed.
- The end product is decided. It may be a large class book, a home-made movie, a collage or a production. The more authentic the better.

Example:
Thematic Teaching—Arts Education/Getting Grades 5 & 6 to "Act Up" the Whole Classroom becomes a Theatre

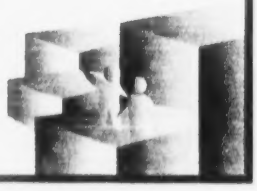
This activity encourages students to appreciate literature while integrating reading, writing, music, art, drama, and dance. Students in both grades work cooperatively towards a goal. Students do the following:

1. Choose a favorite novel.
2. Adapt it into play form by writing the script. (This activity relates to objectives in the English Language Arts Curriculum Guide.)
3. Make sets and props.
4. Design programs, posters, and invitations.
5. Organize lighting and sound effects.
6. Decide who will play which parts.
7. Rehearse. (This activity relates to objectives in the Arts Education, Drama Strand, Curriculum Guide.)
8. Put on the final performance.

For more information, see *English Language Arts and Arts Education Curriculum Guide for Grades 5 & 6.*

Notes to Myself

We might develop units around . . .



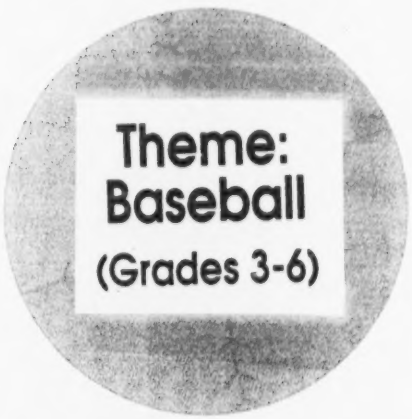
A Sample Theme Web

Science
- Force, hitting/throwing.
- Gravity, pull on ball.
- Action/reaction (Newton's Laws).
- Spin on the ball (physics).

Mathematics
- Numeracy: dimensions of a field, planning a playing field, statistics, scorekeeping, graphing the speed of a ball, probability (use manipulatives), work with numbers from player cards, e.g. batting average.

Art
- Drama: What a game! Who's on first?
- Song: Take me out to ...
- Creating logos for display purposes.
- Artwork and layout of newsletter.
- Moving figures (braids).

Health
- Treatment of game injuries.
- Safety rules (equipment).
- Nutrition and exercise.
- Positive attitude.
- Muscle development and interest in outdoor activities.



Language Arts
- Baseball terminology, word lists, spelling lists.
- Reading: cards of information, novel for interest and background, articles for information/interest, blocks of books to support unit.
- Viewing: watch a highlight video of Blue Jays' season (available from video stores).
- Writing: logs, letters to parents, newsletter (writing process).
- Listening: instructions, poetry, stories.
- Talking: making calls, sharing stories, sharing work.
- Baseball Centre: independent study skills.
- Quotations, puzzles, cartoons, team slogans.

Physical Education
- General activities and skills.
- Adapting the game of baseball:
  . To include all players (everyone active, rotating roles).
  . To less formal, more open-ended games, through study of the formal game.
  . To suit our situation re: number of players, space, equipment.
- Talk about the benefits of the adapted game (T-chart).
- Skills objectives:
  . Reinforce the mechanics of running (non-manipulative), catching/throwing (manipulative).
  . Personal/social skills: fair play, build team spirit, focus on skills development and enjoyment, rather than competition.

Social Studies
- Geography: where in the world?
- Origin of baseball (trivia).
- Study of the people of baseball (research).
- Women in baseball. See Dolores Reimer re: Saskatchewan women in baseball.
- How sports can change a person's social standing and help him/her get out of the Ghetto.
- Sports and society: What role does sport play? What role has it played in the past?

Evaluation
Portfolios, gathering of written work, art work, etc., observation checklists, anecdotal records, immediate feedback: describe, prescribe, note change over time.

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Notes to Myself

Thematic units provide for:

- **Multiple entry levels for students**
- **Differentiated skill development**
- **A central focus for the entire class to help unify the group**
- **The incorporation of many approaches to the same topic**

The following template provides an opportunity to chart out a theme unit for your class (you might want to do this with your students). In planning, it is useful to consider:

- ❒ relevancy to students
- ❒ application to the world outside the classroom
- ❒ available resources
- ❒ variety of instructional methods
- ❒ evaluation
- ❒ reasons for spending time on this topic
- ❒ main objectives

❒ This theme is relevant to my students because . . .

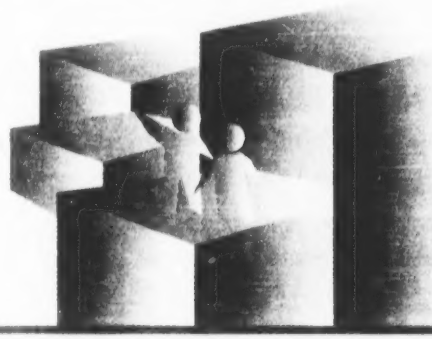
❒ This theme provides for many approaches. Students have opportunities to:

- talk, read or write about it
- draw, sketch, or visualize
- dance it, build it, or experience it through their bodies in some way
- sing, chant, or find music related to it
- relate it to a personal feeling or inner experience
- conceptualize it, quantify it, or think critically about it
- work on it with another person or group of people

❒ There are opportunities for application to the world outside the classroom when . . .

❒ There are ways in which students have options from which to choose when . . .

❒ This is resource based because . . .



Science

Mathematics

Language Arts

Physical Education

Your Theme Goes Here

Health

Arts Education

Social Studies

Evaluation

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2. Learning Centers

Learning centers are designated places in the classroom which contain carefully planned activities and materials based on specific learning outcomes. They emphasize an active, self-selecting and exploratory approach to learning. Learning centers support multi-level learning because they:

- help individualize learning.
- allow the classroom to be student-centered.
- allow for active participation by students.
- encourage independence in learning.
- humanize education.

Notes to Myself

We could develop learning centers on ...

Example:
Learning Centres — Mathematics Workjobs

Students in a Kindergarten, Grade 1 & 2 classroom work at a Learning Center using workjobs in mathematics to explore numbers at three levels.

1. **The concept level** - The concept level is an opportunity for students to discover and think about quantitative relationships in whatever ways occur naturally in their own minds. Students construct different combinations and orally describe them.

2. **The connecting level** - The connecting level is the level at which students link the concepts developed during the concept level with mathematical symbols. Students work with combinations of objects. Numeral cards are placed on pictorial representations of the materials.

3. **The symbolic level** - The symbolic level provides students opportunities to make written records using traditional mathematical symbols in their own handwriting. Students explore addition, subtraction, multiplication, and division.

The learning center includes ten different workjobs that focus on integrating Indian and Metis content into the mathematics curriculum. Students at all levels use the workjobs to explore the concept of number, number recognition, and the operations using the materials at their level of understanding. Students choose one of the following ten workjobs and work with a partner.

Headdresses	feathers
Tipis	symbols
Moss Bag Babies	flowers
Navajo Designs	pattern blocks
Pine trees	pine cones
Bulrushes	cat tails
Women's Stick Game	sticks
Looms	wool pieces
Coyote and Moon	quarter moons
Village Scene	tipis

The teacher may choose to read a legend from the resource list before students visit the learning center to choose one of the activities that extend learning. For example, students may choose to explore numbers using the Bulrushes and cat tails workjob. The teacher or an Elder could read the Saulteaux Legend "Nanabush and the Bulrushes" and at the end of the work period the teacher or Elder might demonstrate the traditional practice of leaving an offering before taking living things from nature.

The patterns for each workjob and a detailed overview of how to use them can be found in: *Mathematics Units for Indian and Metis Students* (1997)

3. Whole Group Teaching

In a multi-level class it is desirable to have some whole group activities. These activities are conducted in such a way that students are allowed to participate on the level that has meaning for them. Many topics such as safety, crime, and pollution are problems for all age groups and should be addressed by multi-age thinking. Whole group discussion can be done at sharing time, news time, or for a discussion of a video. Whole groups are appropriate for concept development, demonstrations, story writing, and thematic teaching. Whole group teaching creates a large group ambiance, a spirit of camaraderie, and a sense of belonging among the students.

Example:
Whole Group Teaching—Social Studies
Topic - Identity

A multi-level class of grades 2, 3, & 4 Social Studies study the topic of "identity".

The topics at each grade level are:

GRADE 2 - Local classroom and school (structure and roles) Local community (natural and constructed features)

GRADE 3 - Making comparisons - Canadian families, schools and communities

GRADE 4 - Geographic features, climate, vegetation, maps, population, places, place names, diverse communities, provincial and regional symbols, Saskatchewan heroes

- The teacher uses videos of Saskatchewan and Canada to stimulate a whole group discussion on identity.
- A guest speaker who has lived in another Canadian city is invited to visit the classroom.
- Families with pictures, slides, or videos are invited to share them with students.
- Students collect pictures that represent Saskatchewan and Canadian identity and construct a classroom mural.
- Students and the teacher together draw a map of their local community and mark in natural and constructed features.
- A community "hero" visits the class as a guest speaker – artist, athlete, actor.
- The students produce a home-made movie using pictures and written script to demonstrate what they learned in the unit.

Notes to Myself

Whole group teaching might be used ...

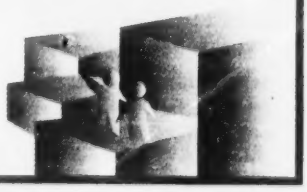
4. Small Group Teaching

Small groups working in a multi-level class:

- help reinforce student independence and the changing role of the teacher.
- produce a means of practicing democratic leadership.
- can be set up according to special interests or hobbies.
- can encompass a number of grade levels.
- provide flexibility to meet individual needs.
- can have a positive social and emotional impact on students.
- can stimulate genuine conversation or physical interaction among students.

Notes to Myself

We could use small group teaching when . . .



Example
Small Groups - Physical Education Movement (Educational Gymnastics)

A multi-level Grades 3, 4, and 5 Physical Education teacher focuses on the organizing theme of movement . . . (Educational Gymnastics).

The teacher sets up five stations in the gymnasium that enable students to continue to develop skills and understandings of the concepts and principles associated with the locomotor and non-locomotor basic movement patterns—locomotion, landings, swinging, rotating, springing, and statics. Students use movement in, about, and through to create and solve movement challenges and tasks, alone and/or with others, with or without small and/or large equipment. Students rotate through each group using the apparatus to perform, refine and combine basic movement patterns into a sequence.

Station 1 - Climbing Apparatus

Station 2 - Box Horse

Station 3 - Balance Beam

Station 4 - Tumbling Mats

Station 5 - Ropes

For more information, see *Physical Education: A Curriculum Guide for the Elementary Level* - (Draft copy) November 1996.

5. Independent Study

Independent study helps incorporate independent learning as one of the Common Essential Learnings in an authentic manner. It guides students in the development of their own ideas, encouraging the use of multiple resources, and planning experiences that lead to independent exploration. In a structured approach to independent study:

- topics to be covered are arranged sequentially in small steps.
- simple directions are provided for the students.
- each new process is carefully explained in simple language.
- practice exercises are provided.
- those activities which can be teacher written and/or tape recorded are often self-checking.
- resource materials are readily available.

Example
Independent Study – Science

Students in a grade 6, 7, and 8 classroom use individual task cards to do independent study in Science. Students choose cards and work through each activity. The activity cards focus on the following core units: Ecosystems - Grade 6, Renewable Resources in Saskatchewan - Grade 7, and Energy Resources in Saskatchewan - Grade 8.

Activities

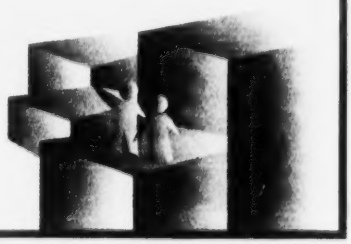
Choose at least three of the following activities:

- Investigate reforestation and develop a personal plan for tree planting.
- Write a letter to the local newspaper describing your plan.
- Read "Tree People" from Keepers of the Earth.
- Develop a skit based on how increased logging changes forest habitat.
- Create a display on the theme of Saving the Forest.
- Design a project to measure paper consumption at home over a two-week period.
- Write a story about how pulp mill pollution contaminates the river.
- Do research to write a report about how a proposed hydro dam threatens eagles.

For more information, see *Science: A Curriculum Guide for the Middle Level* (1993)

Notes to Myself

Opportunities for independent study occur when . . .



6. Individualized Instruction

Individualizing instruction is an essential component of teaching. However, individualized instruction is also used to describe an approach to instruction.

A good example of individualized instruction is that of individualized reading. Individualized reading is really a self-selected, self-paced reading program that students can engage in once they have the acquisition of sight vocabulary and word attack skills that enable them to read available material. The activity emerges in its own form from some interest or concern students have. Students figure out how to proceed with teacher guidance, conferences, and through shared and guided reading on an individual or small group need basis.

This approach encourages resource-based learning with a classroom that contains a good collection of literature at various levels as well as a good supply of other learning materials. Books may also be borrowed from the nearest public library. Individualized reading can be set up as themed or non-themed.

Class periods consist of planning, reading time, working time, sharing and evaluating.

Notes to Myself

Individualized instruction can be adapted for use when we . . .

Example
Individualized Reading - English/Language Arts

Task card method - You are the book's illustrator.

- Draw and color the most interesting part of the chapter.
- Write a description of a character. Try to include the following: What he does, size, shape, weight, how he moves, clothing, facial features, bodily features.
- You are a newspaper reporter. Tell about something from the chapter as if you were reporting it. Don't forget the headline. And take a picture, too!

Selection method

- Read a chapter.
- Do one activity from list A, one from list B, and one from list C.
- Don't do the same activity again, until you have done them all once.
- You may take several days to read your chapter or finish an activity or you may read and do several activities each day.
- At the end of each reading time, write on your chart what you did.

7. Peer Tutoring

When you learn how to teach others you learn how to teach yourself. Many teachers believe that the effect of the help which students consciously and unconsciously give to each other is immeasurable. Teachers in multi-level classes encourage peer tutoring because:

- A student's behavior at any age is strongly influenced by the opinion of peers.
- With teacher guidance, students can become effective instructors in the classroom. They can instruct on a one-to-one basis or to groups of students.
- They speak each other's language and they can often explain something to peers much more effectively than adults can.
- Experience has proven that the peer teacher is learning as much if not more than those being taught.
- Peer tutoring can be particularly effective when the student has just mastered the skill.
- Students sometimes have more insight into what problems their peers are having.

Example
Peer Tutoring - Mathematics

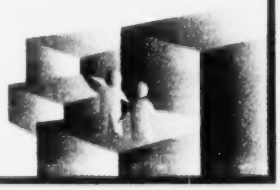
In a grade 7, 8 & 9 class grade 7 students are learning how to represent integers by using counters of two colors, blue and green linking cubes, red and black checkers, and Algé-tiles. Some grade 9 students who have learned how to use these materials in grades 7 and 8 become the "teachers" and help grade 7 students explore and solve mathematics problems. Other grade 9 students help the grade 8 students extend their learning from the previous year. They work with students to:

- represent integers using the concrete objects
- recognize use of integers in the real world
- locate integers on the number line
- compare and/or order integers
- add and subtract integers using the concrete materials

For more information, see *Mathematics: A Curriculum Guide for the Middle Level* (1996)

Notes to Myself

Peer tutoring could come in handy when . . .



8. Play - Debrief - Replay

The play-debrief-replay approach is most suitable for any situation where discovery learning is being used. It was developed by Wasserman and Ivany (1988) to help develop students' skills in Science. Students explore and discover ideas in three stages:

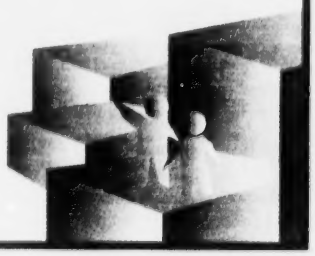
Play - In this first stage the teacher creates conditions for exploration and discovery. Students carry out investigative play with materials provided. In small groups, students manipulate materials, conduct experiments, classify, explore materials and record information.

Debrief - After the play period the teacher calls the whole group together for debriefing. The teacher assists the students in reflecting on their experiences and helps them extract meaning from them. Students share what they observed and the teacher and other students help show how this relates to science or mathematics concepts. This can be done in a two column format where the teacher generates from students "What they learned" in one column and "What they still wonder about" in another column.

Replay - Students go back to the same small groups and replay with the same materials. Some investigations are repeated while in other cases the groups explore new investigations based on the discussion during debriefing.

Notes to Myself

We could use play-debrief-replay when ...



Example
Play-Debrief-Replay-Science Learning About the Properties of Bubbles

In a multi-grade 3, 4, 5 classroom students work with soapy water to make some observations about bubbles. The objective is to promote increased awareness of the properties of bubbles.

Materials:

- a solution made of a few drops of glycerine in four litres of water, with a cupful of liquid detergent in a plastic bucket or container
- straws
- flexible wire and cutters
- a few funnels of different sizes

Play

- Use the materials in this center to find out what you can about bubbles.
- What observations did you make?
- Talk to each other about what you found.
- Then write about your observations.

You may wish to use the material in this center to create some other investigations. Try out your ideas and see what happens.

When the initial play periods seem to have lost their productivity, you may want to extend the inquiry in one or more of the following ways:

- By adding new materials to the bubble center, such as bubble pipes, sponges, waxed paper with holes of various sizes, paper cones, wire frames of different shapes.
- By introducing new activity cards.

Debrief

Here are some questions that may be raised during initial debriefing sessions:

- What observations did you make about bubbles?
- What did you observe about their size? shape? color?
- What observations did you make about the life of a bubble? Which bubbles lasted longer? How do you explain this?
- What makes a bubble pop more quickly? How do you know that is true?

You may extend the debriefing by adding more challenging questions such as:

- Why do you suppose bubbles are always round?
- How do you suppose you could make a square bubble?
- Why do you suppose bubbles have colors?
- Where does the coloring come from?
- What explanations do you have for this?
- Why do you suppose bubbles pop so quickly?
- How might you extend the life of a bubble?
- Conduct some investigations to see how this might be done
- What makes the biggest bubble?
- How do you explain this?

Replay

Students return to the materials used in the play stage and do further explanations or to bring these studies to a culmination, invite students to carry out one or more of the following creative activities:

- Work with a friend. Design a house made of bubbles. Draw a picture of it.
- Write a poem or make up a song about bubbles.
- Make up a story, "The Bubble That Never Popped."

For more information, see *Science: A Curriculum Guide for the Elementary Level* (Revised, 1995)

9. Cooperative Learning

Cooperative learning allows students of different ages to work together in a group small enough so that everyone can participate on a clearly assigned task. Students are expected to carry out the task without direct or immediate supervision of the teacher. Members need each other to complete the task; they cannot do it by themselves. The basic elements of cooperative learning are positive interdependence, face-to-face interaction, individual accountability, interpersonal and small group skills, and group processing. The skills within these elements are the specific behaviors which group members use to work well together. These skills are not age specific; in fact, they are often developed more readily when students of different ages work together.

Example
Cooperative Learning - Health
Jigsaw Approach

Students in an integrated Grade 7 & 8 Health and Career Guidance class focus on a unit called: *Understanding Adolescent Growth and Development*

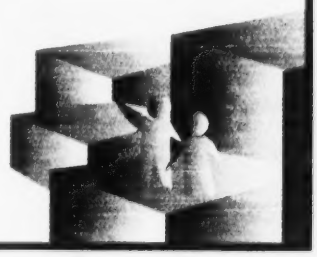
The students work in five cooperative groups. They are divided into home groups and then into expert groups where each group is given a topic to research. Topics are:

- Managing Emotions in a Positive Way
- Understanding Family Support
- Strengthening Family Relationships
- Confronting the Realities Some Adolescents Face
- Building Self-Confidence and Communication Skills

Have students complete a journal entry before they do their research. At the end of the unit, they can compare their two journal writings and reflect upon their differences, if any. Then, expert groups use resource-based learning to research their topic. Each group member is responsible for checking at least one source as well as assisting others to find information. The expert group uses one of the categories from multiple intelligences to create a strategy for presenting the information in their home groups. Individual students do journal entries after each topic presentation to summarize what they learned. Their journal entries are used as an evaluation technique.

Notes to Myself

We could use the jigsaw approach when we are learning about . . .



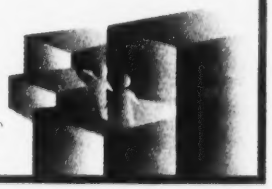
10. Experiential Learning

Experiential learning is the actual living through an event or events. Instead of hearing, talking or reading about something, students participate in the content to be studied. The process is normally inductive, learner centered, and activity oriented. Experiential learning occurs when learners:

- participate in an activity,
- critically look at the activity to figure out learnings and feelings,
- draw useful insights from analysis,
- put learnings to work in new situations.

Notes to Myself

Experiential learning could be incorporated in . . .



Example
Experiential Learning - Science (Heat)

Students in a multi-level grades 3, 4 & 5 class participate in a series of activities that:

- develop the concept of heat as a form of energy
- investigate sources and uses of heat energy
- explore the properties of matter and identify changes in matter

The teacher sets up five learning stations around the classroom. Students work in small groups with a mix of age levels in each group to explore, investigate, identify, and discover the concepts of heat as a form of energy.

Station 1 - Balloons, clay, candles - Using these materials students explore how using different degrees of heat affect the materials.

Station 2 - Three pails of water at different temperatures, ice cubes, thermometers, kettle for boiling water - Using these materials students investigate the changing temperature of water and what affects it.

Station 3 - Different kinds of wire, candles, matches - Using the materials students explore and investigate how heat transfers through metal.

Station 4 - Candle, beaker of water, wire screen, black pepper, powdered charcoal - Heat water with the burning candle. Add some pepper or charcoal to the water and move the candle around under the beaker. Also use the screen between the beaker and the candle to explore different effects.

Station 5 - Have a contest to see which group can design the best "solar energy trap".

Required Areas of Study

There are a number of effective ways to ensure that students in a multi-level class achieve the objectives in the required areas of study. The methods used depend on the teacher, the school, and the students.

Equity in the classroom does not mean that everyone gets the same; it means that everyone gets what they need.

In order to accommodate a number of age and ability ranges within a classroom, teachers adapt curriculum and instruction by making adjustments in content, instructional practices and the learning environment.

This section focuses on the required areas of study in a multi-level classroom. Although each area is addressed separately, ideas for integration across subject areas and grade levels encourage the notion of a seamless curriculum as a key ingredient in successful multi-level instruction.

English Language Arts

The aim of the English Language Arts curriculum guide is to graduate students who can use language confidently and effectively to meet life's various intellectual, social, and vocational challenges. In multi-level classrooms, language is taught throughout the day as students have opportunities to listen, read, speak, and write in all subject areas. Teachers use a wide range of differentiated instructional approaches in Language Arts to provide for individual needs and meaningful practice.

Approaches that are conducive to a wide range of abilities in both English and French Language Arts classes are:

- Book talks
- Student conferences
- Author's chair
- Mini lessons
- Literature circles
- Author studies
- Readers and writers workshop
- Levels approach
- Response to literature

Example
Response to Literature

Students in a multi-level class are studying poetry. They choose a poem that is of interest to them. They choose one of the following ways to respond to their poem:

Take a poem home to meet your family - Find a poem you would like to take home to read with your family. Read the poem to someone in your family. Talk about your ideas and the pictures in your head. Remember to encourage other people's ideas. Let them read the poem to you. Work together to show your ideas in pictures or in words. Write a notice together telling your teacher how you got along.

Partners in poetry - Find a partner. Read the name of the poem together. With your partner make up two questions about the poem. Read the poem together. Talk about your ideas: What parts did you like? Were your questions answered? Read the poem again. Decide how you will show your ideas. You can use both words and pictures. You might make a web or a cartoon. Work together to show your ideas.

Show your ideas - Read the poem. Remember you can doodle or draw as you read. Think about the words and ideas. Read the poem over and over again. Show your ideas, feelings, and pictures. You can use words, pictures, cartoons, webs, or anything you like.

(Fogarty, 1995)

Mathematics

The aim of the Mathematics curriculum guide is to graduate numerate individuals who value mathematics and appreciate its role in society. Creating a mathematics community in the multi-level classroom offers all students an invitation to learn mathematics at their own level of development. A classroom which has lots of manipulatives, learning centers, displays, games, activity cards, and a collection of other mathematics resources invites students to explore, investigate, and develop mathematical literacy. The variety of activities and materials provide for individual differences and active involvement of the students. The mathematics program provides opportunities for integration into the other subject areas and progresses through a cycle from concrete to semi-concrete to symbolic. The gaining of mathematical concepts is not limited by textbooks or grade levels. Each student has opportunities to enrich and extend mathematical concepts. As knowledge of mathematics increases, students are encouraged to investigate topics outside the basic curriculum. The mathematics program in a multi-level classroom can be structured in a number of ways.

Manipulative-Based

Teachers who use a manipulative-based approach to teaching mathematics believe in constructivism. That is they view learners as active participants in the learning process. Students interact with objects, materials, people, ideas and thoughts. They explore, experiment, discover, agree and disagree as they gain information through constructing their own knowledge of mathematics. Teachers structure learning activities around manipulative materials that are used to help students understand concepts and skills. They provide concrete introductions to abstract ideas. Most manipulatives can be used by students at different levels to achieve the objectives of the curriculum. Examples include:

- base ten blocks
- attribute blocks
- cube-a-links
- pattern blocks

Example
Using Pattern Blocks in a Multi-Level Classroom

The chart demonstrates how pattern blocks are used across the grade levels from Kindergarten to Grade 9.

Grades K, 1, 2 & 3

- sorting and classifying shapes, colors, and sizes
- plane geometry
- making patterns
- measurement

Grades 4, 5 & 6

- plane geometry
- measurement
- rational numbers
- complex patterns
- fractions
- area
- perimeter
- space geometry
- lines and line segments

Grades 7, 8 & 9

- rational numbers
- complex patterns
- plane geometry
- algebra
- polygons
- decimal numbers
- fractions
- area
- length
- space geometry
- angles, lines, and line segments
- ratio and proportion

Strand Based

A strand based approach to organize mathematics means the teacher uses the curriculum guide to identify the:

- strand
- foundational objectives
- specific objectives
- materials
- activities

If the strand is measurement, all students in the class work with measurement activities at their own level. The chart below depicts the skills and concepts in the measurement strand from the Elementary and Middle Level Mathematics curriculum guides.

Example

The measurement and geometry/measurement strand in a multi-level classroom

Grade	Foundational Objectives	Topics	Materials	Activities
K, 1, & 2	Serialize objects • short to tall • empty to full • long to short • sort and classify according to size	• length • perception of size • comparing - more than, less than, equal to • ordering	• readily available real-life materials • materials from the pre-math experience unit from Indian and Metis math units	• assortment of activities for pre-math skills and concepts • activities from pre-math Indian and Metis units
	• ability to measure • use appropriate measurement techniques • apply to real life	• mass • time • temperature • money • length • area • capacity • angles	• balances • linking cubes • clocks • thermometer • centimetre cubes • real money • play money • containers • boxes • weights • calendars	• active learning experiences using all materials • real-life connections • integration across subject areas • integration across strands
3, 4, & 5	• ability to measure • use appropriate measurement techniques • apply to real life	• length • area • capacity • volume • mass • time • temperature • money • angles	• balances • linking cubes • clocks • thermometer • centimetre cubes • real money • play money • containers • boxes • weights • calendars	• active learning experiences using all materials • real-life connections • integration across subject areas • integration across strands
6, 7, 8, & 9	• ability to measure • use appropriate measurement techniques • apply to real life	• length • area • volume • capacity • mass • time	• variety of measuring devices • geoboards • linking cubes • graph paper • boxes etc.	• students work with task cards, in pairs or small groups to do a wide range of activities

A Literature-Based Approach to Math and Language Arts

When teachers use a literature-based approach, they integrate mathematics and language arts. Teachers choose trade books that can be used by students to explore mathematical concepts. Many trade books accommodate varying abilities. Teachers use the same book, but choose activities appropriate to the mathematical needs and abilities of the students. For example, the book *Gulliver's Travels* can be used to integrate mathematics, reading, writing and drawing. It can be used in a multi-level classroom in the following way.

Example

Mathematics and Language Arts — Gulliver's Travels

The story can be used across all levels and lends itself well to investigations involving:

- measurement
- fractions
- number
- data management
- problem solving
- ratio and proportion
- understanding size
- size and order
- pairing and matching according to size
- making models to scale

Gulliver Activities - These activities focus on the people from two lands: Lilliputs (tiny people) and the Brobdingnags (giants).

Measure actual size tracings of people, animals, and things from both lands.

Estimate the sizes of other things in both lands.

How large would a child's desk be in Lilliput?

How large would a Lilliputian classroom be?

How large would the child's mother and father be?

Make actual size drawings of a Brobdingnags:

- pencil
- calculator
- toothbrush
- eyes, nose, ears, and mouth

Parents work with me to collaborate, do research, prepare and teach lessons and units, and to assist in evaluating student progress and educational objectives. This requires a true community of trust, sharing, ownership and openness to change. As we add a second staff person, I recognize the need to develop collaborative skills. Parents are given webs to fill in as we approach a new unit and are invited to suggest concepts, activities, and resources. They sign up for activities to either lead or assist research or think of other ways to help.

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Science

The aim of the Science curriculum is to develop students who are scientifically literate. Major concepts and desirable patterns of behavior can be developed in science by the participation of students of various age levels in one group. Core units such as Earth, Plant Growth and Structure, and Matter are topics that appear at almost every level of the Science curriculum. Listing the core and optional units and the grade levels in column format allows teachers to group the same topics from each grade level and design learning activities which can be explored at different levels. For example the core and optional units from the Saskatchewan Elementary Science Curriculum Guide for Grades 1-6 and Middle Level Science Curriculum Guide for Grades 7-9 can be organized in a chart like the one here. This demonstrates how the same topic occurs at a number of grade levels.

Example

Science – Comparison Chart

GRADE	ANIMALS	MATTER AND ENERGY	EARTH	PLANTS
1	animals	classifying matter	earth	plants
2	habitats	measuring matter	weather air & water	plant growth
3	animals	properties of matter	earth	plant structures & adaptations
4	vertebrates & invertebrates	forms of energy	fossils and rocks	plant diversity
5		matter and its changes	oceans	plant structure & function
6	plants and animals	atoms and reactions	earth's climate	plant & animal adaptations
7	renewable resources	force and motion	temp. and heat	plant and growth
8	adaptation & succession	energy and machines	the moving crust	adaptation succession
9	diversity of life	chemistry and you	the atmosphere	diversity of life
		using electricity	Sask — the environment	Sask — the environment
		fluids and pressure		

Social Studies

The aim of the Social Studies curriculum is to help students to participate responsibly in a world of interdependent peoples, communities, and nations. The Social Studies curriculum guides are organized with a major theme for each grade. The themes present a sequence designed to move students from the familiar to the unfamiliar and from a local to a global view of the world. The curriculum guide also places major emphasis on developing a skill/ability at each grade level. For example, locating information is emphasized at grade 4, gathering information at grade 5 and organizing information at grade 6; however, it is understood and expected that there will be overlap and that virtually any skill can be practiced at various levels of sophistication. The elementary guide has four units of study at each grade level each developing, in detail, one major concept. The four major concepts, identity, heritage, interdependence, and decision making are the same for each grade level. Teachers can use multiple resources to introduce a major concept to the whole group and then have differentiated assignments for students at various levels. The subject matter does not need to be divided into grades. Students do the same learning activities at a different level of investigation.

Example
Social Studies

A teacher with a multi-level grade 3, 4 and 5 class organizes a Social Studies unit around a major concept - Heritage. The topics in the chart below are used. Students use resource-based learning to explore one or more topics by developing a skill/ability at their level.

MAJOR CONCEPT - HERITAGE

GRADE	TOPIC	SKILL/ABILITY
3	Canadian communities then and now	Locate, gather, and organize the information
4	Exploring First Nations Peoples	Locate, gather and organize the information
5	Confederation, treaties, wars , and peace	Locate, gather, and organize the information

To encourage students to organize their thinking around what they already know about a specific topic they fill out a chart like the one below.

What do you already know about?	What do you wonder about?	How can we find out answers to some of our questions?

Arts Education

The Arts Education program has one major aim: to enable students to understand and value arts expressions throughout life. All four strands of the Arts Education curriculum lend themselves to a multi-leveled classroom. The Arts Education program must be built on individual, independent growth. Visual Art, Drama, Music and Dance all reflect a student's uniqueness.

The Arts Education curriculum is structured, through the inclusion of three components, to achieve a balance in focus. The three components are: **creative/productive, cultural/historical, and critical/responsive**.

Each student is creative but in different degrees and in different ways. Teachers set the tone and create an atmosphere for creativity in all strands of Arts Education through their enthusiasm. They know which students need to be inspired, which ones need little guidance and which ones need only praise and encouragement. All students need an opportunity to learn and to express themselves through some form of Arts Education. Teachers carefully plan activities to encourage this expression. Activities provide visual, auditory, kinesthetic, and tactile experiences to broaden the students' worlds in each of the three components listed above.

Example

DANCE - MOVEMENT AND SOUND

GRADE	TOPIC
1	Movement in the environment - wild animals, the school yard, and pets
2	Movement in the environment - the playground, spring, metamorphosis
3	Movement and sound in the environment - school sounds, insects, work
4	Movement and sounds in the environment - prairie sounds, machines, and sports
5	Movement and sounds in the environment - Gestures, electronic and mechanical sounds
6	Choreography transforms ideas into movement Students develop their own voice
7	Choreography transforms ideas into movement Students develop their own voice
8	Choreography transforms ideas into movement Students develop their own voice
9	Choreography transforms ideas into movement Students develop their own voice

Physical Education

The mission of physical education is the development of autonomous, life-long learners who participate in physical activity on a regular basis. The teacher plans a variety of activities to promote physical education **in, about**, and **through - movement, active living**, and **personal, social, and cultural awareness.** The physical education program emphasizes active living through participation in a balanced variety of experiences.

Example
Active Living Perspective
Physical Activity in a Natural Setting - Grades K-4

The content of the active living perspective is organized around the following themes:

- regular participation in physical education
- positive attitudes toward physical education
- benefits and effects of physical education
- personal growth and development
- nutrition and physical activity
- physical activity in a natural setting
- safety while engaged in physical activity

A teacher in a multi-level class of grades K - 4 provides learning opportunities around the organizing theme "Active Living", and focuses on the sub-theme of physical activity in a natural setting. The teacher plans trips to natural settings during different seasons. The students do the following activities:

- Explore possible activities in the out of doors - jog, walk, build snow forts.
- Plan a cross country run, hike, walk, or bike trip in a park or appropriate natural setting. Discuss the importance of preserving the environment and of activities that do not disturb the natural environment.
- have students participate in activities in an outdoor setting (e.g. orienteering, hiking , and canoeing) and consider ways to avoid disturbing the natural setting.
- Write a poem about using but preserving the natural environment.
- Keep a log of activities and learning experiences from each trip to the natural setting during each of the seasons.
- Make a list of the different physical activities they participated in during each season.

Health

Health is a positive state of physical, social, and emotional well-being which makes possible a high quality of life for the individual, family, friends, and community. The educated healthy person is one who understands the basic facts about well-being, who protects his/her own health and the health of his/her family, and who works to improve the health of the community.

Example
This unit integrates Middle Level Health and Career Guidance at the Grades 7, 8 & 9 level

Students develop a Health Action Plan at Levels A, B and C while integrating Goals from Career Guidance.

Level A	Accessing and evaluating multiple resources
Level B	Examining alternatives, consequences and decisions
Level C	Designing an action plan, carrying it out, and evaluating it.

The ideas and information for this unit can be found in Health Education, A Curriculum Guide for the Middle Level, Revised (1997) and Career Guidance, A Curriculum Guide for the Middle Level (1995)

Refer to:
Health - Unit 4 - Understanding Adolescent Growth and Development
Career Guidance - Goal 1 - Self Awareness

I often hear that it must be difficult to teach in a room with three grades. I am asked how I can meet the needs of all students. My answer is that I don't have any wider range of needs and capabilities in my room than a classroom with one grade would have. Units are planned with all the needs and capabilities of all students in mind and expectations vary depending on the student.

Timetabling

Teachers in multi-level classes use a variety of instructional approaches and have a wealth of ideas for teaching the various subject areas. Together with students and support personnel they plan a schedule outlining daily sequences. Setting a timetable for the multi-level class is not a simple task. The teacher provides time for whole group discussions, small group work and individual endeavors in order to support a community of learners in the classroom.

Notes to Myself

Timetable Ideas . . .

A Typical Day

9:00 - 9:15	Meeting Time - Great Beginnings! - whole class
9:15 - 10:00	Mathematics - all grade levels working in centers using manipulative based approach -pattern blocks.
10:00 - 10:30	Theme Studies - Integration of subject areas
10:45 - 11:30	Language Arts - all students working on individualized reading using the task card or selection method
11:30 - 12:00	Reading - oral reading to whole group by teacher or pupil -author's chair. • includes a library visit twice a week. • a silent reading (DEAR) session.
1:00 - 1:45	Science and Social Studies
1:45 - 2:30	Physical Education and Health - Integrated
2:45 - 3:30	Arts Education - Three days a week, Science and Social Studies, one day for each

An option may be to read orally to students at the end of the day when both the teacher and students may be tired. Some teachers in rural areas may choose to have Physical Education to start the day, outside, to wake students up after a long bus ride.

Multi-level classes with low enrollment enable teachers to set up the daily schedule under subject areas with the activities for each student or pair of students outlined similar to the example below.

A Typical Morning

9:00 - 9:15	Morning Meeting
9:15 - 10:00	Mathematics • Susan and Jane - practice of addition facts - (1 - 10) • John - place value (Base ten blocks) • Tim and Carol - Addition Facts (10 - 20) • Jack and Joanne - Review of fractions • Katherine - Addition of fractions • Kindergarten Students - Workjobs to explore the concept of number
10:00 - 10:30	Choice Boards
10:30 - 10:45	Recess
10:45 - 11:30	Theme Studies
11:30 - 12:00	Reading and Writing

A Typical Day - Thematic Teaching - *Theme - Communities*

9:00 - 9:15 Class meeting

9:15 - 10:00 Required/Optional Activities
In groups students choose one of six activities:

1. Build a dual diorama - one half depicts an urban environment, one a rural.
2. Students write a letter to another province teaching them about their community.
3. Students visit other classrooms and collect data about teachers' home towns.
4. Students view a filmstrip on some problems normally associated with urban life.
5. On a large sheet students create a community calendar of events.
6. Students do a puppet show after reading the book *Country Mouse, Town Mouse*.

10:00 - 10:30 Writing Process - Students write in journals, create a big book, write a fact book, or create a play from some events in a book about communities.

10:45 - 11:30 Mathematics - Students choose activities from the following:

- Survey adults in the community and collect data on different occupations.
- Survey the prices of selected foods at the various stores in the community.
- Practice measurement by bringing in recipes from different ethnic groups in the community. Prepare a "Cultural Feast Day".

11:30 - 12:00 Teacher-Directed Activities

- The teacher asks students as a whole class to generate a list of words (adjectives) used to describe communities.
- The teacher reads aloud a story about communities and students listen for adjectives in the story.
- The students work in small groups. Each group is assigned one province and are asked to use resources to find out about the province and to create a list of adjectives that describe the province.

1:00 - 1:45 Students do art and music activities related to communities and different cultures.

1:45- 2:30 Physical Education - Using resources in the community - a nearby park.

2:45 - 3:15 Health - Building a Positive School Community.

3:15 - 3:30 Daily Closure.

The Authentic Assessment of Students

The process of assessment can be exercised only in terms of predetermined goals. If there are no goals or objectives in mind for an assignment of a task or activity, then it is difficult to make a judgment as to whether or not anything has been accomplished. Students must see goals as personal and purposeful. If this is true, then they must be involved in the planning and setting of goals for themselves. Goal orientation in a multi-level classroom can be introduced to students in a group context and then later refined in the more intimate setting of a student - teacher conference or at a three-way student led conference with parents participating. Authentic assessment allows teachers to differentiate instruction, initiate diagnostic or corrective projects, and plan for future activities.

To ensure continuous progress of students in multi-level classrooms an effective evaluation system must be maintained. Continuous, ongoing assessment is essential in any classroom. Valid assessment models that work across grade levels need to be chosen. Following is a summary of techniques which are representative of ways in which effective evaluation and assessment can occur in a multi-level classroom.

1. **Buzz Sessions**
Sometimes referred to as class meetings these sessions usually take place at the beginning or the end of the day. They are designed to monitor the general pulse of the classroom, promote problem solving, and aid in setting and evaluating goals.

2. **Pupils Personal Check Records**
These are the students' own record of activities completed and progress made.

3. **Master Chart**
This is a large open record to which information is transferred by students. It provides an instant reference for both teacher and students indicating who is doing or has completed what.

4. **Anecdotal Card File**
Teacher's personal record on each student, contains notes, reminders, and special information on academic progress, personal behavior, and individual needs.

5. **Student Portfolios**
A portfolio is a collection of student work reflecting learning progress. Both process and product need to be documented. The portfolio clearly lays out the student's learning for all the partners in the assessment process to reflect on the student's growth over time. For parents, the portfolio represents the child's growth; for students, it is a celebration of their accomplishments.

6. **Pre-conference Assessment Sheets**
Aids students in preparing for individual conferences with teacher. Teacher uses identical form to make notes and references before and during conference. Student and teacher each keep own copy for reference.

7. **Individual Conferences**
For most students, one weekly conference is sufficient; others may need this private time with the teacher more or less often.

8. **Student Self-Evaluation**
With experience and practice, students learn to articulate their goals and explain their accomplishments. To help students improve their self-evaluation skills teachers can give them prompts that encourage them to think about all aspects of their work. For example, the following prompts provide guidelines:

- How do I help others? Have I helped my class?
- Do I get my work done on time?
- How much do I read? What kind of books do I like best?

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- Do I follow directions?
- What are some things I think I need to improve?
- What are some things I think I excel in?

Student journals are an excellent source for self and teacher evaluation

9. **Observations**
Observations are objective, accurate reports of actions, a situation, or conditions. They can take the form of running notes, timed samples, or checklists. Teachers gather pertinent information to help plan further instruction in all curriculum areas and in social development

10. **Three-way conferences**
Three-way conferences bring students, teachers, and parents together to celebrate and share student learning. During three-way conferences everyone has a role to play. Students share what they know as they share their accomplishments and set new learning goals. Parents find out about their child's learning, have the opportunity to ask questions, express their ideas, and help make plans to support learning at home. Teachers facilitate the three-way conversations. They support the students and the parents by clarifying, elaborating, and responding to specific questions and concerns.

Rubrics — Indicators of Success

Teachers create rubrics to measure degrees of student understanding when complex, performance-based assessments are used. When assessments result in either physical or written products, teachers enter into "the area of judgment" and need the explicit criteria of a rubric to help them rate the quality of students' finished products.

Students need rubrics to help them make distinctions between acceptable and unacceptable performance. This is the start of setting standards, and what happens is that, as students see examples of exemplary work, their own standards increase. Well-designed rubrics are "anchored" with examples of student work at each level. Through such examples, students see how performances at each of the levels differ. When teachers collect examples of student's work, they are able to begin to create indicators of what level of work to expect for various age levels. In Language Arts, for example, Jeroski, Brownlie & Kaser, (1990) used students' work to determine what kinds of indicators are appropriate for describing the depth and personalization of students' responses to their reading. They developed the following criteria and categories from the responses of students from ages eight through seventeen. The scales can be adapted to any age; for example, it is usually more helpful with younger students (ages four to seven) to describe three levels of responses (powerful, developing, and

An Example: Depths of Understanding Rubric

Powerful—The response is personalized and thoughtful. The student integrates previous experience and includes specific references to the text. The ideas expressed go beyond the text, describe the comparisons or metaphors, and indicate a relatively deep or sophisticated understanding of the selection.

Competent—The response is consistent and logical and features some integration of previous experience and includes text references. The student may focus on one aspect of the poem, not describe the metaphor, or deal with the idea on a surface level.

Partial—Some inconsistencies are apparent, suggesting a partial or incomplete understanding of the poem. Typically, the student makes less frequent use of images, emotions, and specific text references.

Undeveloped—The response is inconsistent or illogical. The student may offer broad general statements without explanation. If any references are included, they may be inappropriate or illogical.

supported) rather than the four listed below. The scoring guide and comments offer models for teachers and students to use in developing criteria in their own classrooms.

Other features of well-designed rubrics include:

- a four- or five-point scale. A six-point or higher scale makes it difficult to distinguish between a level II and a level III performance.
- equal distances between levels. There shouldn't be giant leaps between points on the scale.
- student-defined criteria. When students help design the rubric, they have an investment in the assessment.

Provincial Learning Assessments

The 1995 Provincial Learning Assessment in Mathematics and the 1996 Provincial Learning Assessment in Language Arts both include examples of Criteria and Exemplars which are used to assist teachers to score writing and mathematics achievement. The Language Arts Assessment includes holistic reading and writing criteria for grades 5 and 8, as well as exemplars that show what a performance level looks like. The Mathematics Assessment defined two categories of achievement: acceptable and excellent, and established criteria to classify performance into these categories for each curriculum strand.

Four Authentic Approaches

Egeland (1997) wrote and piloted four different types of authentic assessments for grade five students for a unit on simple machines. They provide for individual levels of development and different learning styles.

1. An assessment that requires students to individually sketch their answers to the questions on levers. This mirrors the SAIP (School Achievement Indicators Program - used by Saskatchewan Education) science tests, which incorporate questions that ask students to draw their answers.

2. An assessment that requires students to work in groups to construct and explain how three pulley arrangements work. Once the group constructs and practices using the pulleys, they are asked questions about the mechanics of the pulleys. Group members respond out loud.

3. A take-home exercise that requires each student to connect with the world outside the classroom the concepts of inclined planes, wedges, and screws. Students must describe examples of these simple machines and explain how they work or might be modified.

4. A complex performance in which students may either design and construct a complex machine that performs some task or, alternatively, take apart a compound machine and show how the simple machines inside make it work.

By planning a variety of ways for students to display or explain what they have learned, it is possible to glean a more accurate picture of individual and group learning. The best way to collect data was to design assessment measures that resembled actual learning tasks. Egeland (1997) suggests that teachers can then design a rubric to assess student work. For example, to assess the final project on simple machines, a rubric like the one on page 48 could be used.

My experience with a multi-level classroom we call clusters has been a positive one. The school has no desks. Each room has round tables that students sit at in groups of different age, grade and academic levels. Cooperative learning and peer tutoring almost happen automatically.

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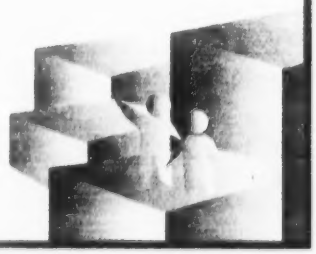
	Above Standard	At Standard	Below Standard
Use of simple machines	Involves more than 4 kinds of simple machines.	Involves 3-4 kinds of simple machines.	Involves fewer than 3 kinds of simple machines.
Understanding of simple machines	Can explain clearly and in detail how it works.	Can generally explain how it works.	Has difficulty explaining how it works.
	Can explain clearly and in detail how it helps us do work.	Can generally explain how it helps us do work.	Has difficulty explaining how it helps us do work.
Quality of Project	Very dependable and almost always works.	Fairly dependable and usually works.	Seldom or barely works.
	Display or video or construction is of superb quality.	Display or video or construction is of good quality.	Display or video or construction is of poor quality.

Notes to Myself

How or when could I use a rubric like this one?



Keeping Records

The most effective method of keeping records seems to be one of keeping as few as possible — only those which are absolutely needed and for which there is indisputable reason. When considering what kind of record you are going to use, ask these questions:

- What do I expect this record to tell me?
- Is the conclusion of this record important?
- Might I reach the same conclusion better with another kind of record, or with no record at all?

Two good reasons for keeping records seem to stand unquestioned:

1. To tangibly set and mark goals accomplished. (It provides challenge, motivation, and instills feelings of success in progress or movement toward a desired end.)

2. To provide tangible evidence of HOW time was spent, WHAT has been accomplished, and WHAT PLANS need to be developed or revised for the future.

For the student, records should be personal and daily. They may take the form of checklists, portfolios, daily "report cards," graphs, or charts. Other records may simply denote activities completed, learning centers visited, or they may also include some element of evaluation or indication of how the student viewed his success in a completed task.

Notes to Myself

Ideas for record keeping:

I can . . .

Students can . . .

Notes to Myself

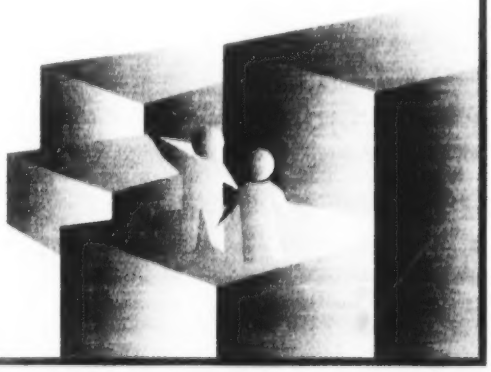
1. When I teach in a multi-level classroom, I will start by . . .

2. I will use curriculum guides to . . .

3. Instructional approaches that create a community of learners are . . .

4. The roles and responsibilities of all members of the learning community are . . .

5. I might best meet the objectives for each grade level by . . .



Conclusion

Teaching in a multi-level class is a rewarding, satisfying and challenging way to teach students. The role of the teacher changes as students become responsible for much of their own learning and develop a cooperative attitude towards education. Multi-level classes are a viable solution to declining enrollments. As the reality of the multi-level classroom increases several considerations become necessary. Teachers and administrators will be carefully chosen for their philosophy of education and their willingness to accept the task of teaching a multi-level group. Professional development opportunities help teachers:

- establish a sound philosophy of open education,
- build confidence,
- interact with other multi-level teachers, and
- gather a number of practical ideas regarding organization and provision of good learning experiences for all students.

> *Development of friendships is enhanced as older students feel free to play with younger students at their social level.*

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Multi-level Resources available from the Stewart Resources Centre

2317 Arlington Avenue
Saskatoon, SK S7J 2H8

Phone: (306) 373-1660
1-800-667-7762

Fax: (306) 374-1122

E-mail: src@stf.sk.ca

Curriculum management project 1993/Saskatchewan Hutterian Educators' Association, Saskatchewan, Saskatchewan Education, Training and Employment - Regina, SK: Sask Ed, 1993.

This project is designed to integrate the concepts and objectives related to three areas of study: English Language Arts, Social Studies, and Science into a usable framework for teachers in a Gr. 1-9 classroom.

Full circle: a new look at multiage education.
Chase, Penelle. Doan, Jane.
Portsmouth, NH: Heinemann, 1994.

How to manage your multi-age classroom: Grades K-2.
Merrick, Sandra
Huntington Beach, CA: Teacher Created Materials, 1996.

Language arts/English handbook for primary teachers in multi-graded classrooms.
Manitoba. Manitoba Education. Regional Services Branch.
Winnipeg, MB: Manitoba Education.

A learner-centered school.
[Videorecording]/Indiana University. Radio and Television Services Production.
Bloomington, IN: Distributor, Phi Delta Kappa, 1994. 2 video cassettes (50 min., 44 min.); 1/2 in. + facilitator's guide (36 p.)
Audio Visual. Introduces teachers, administrators and consumer groups to a learner-centered model of teaching and learning that is being used at Williston Central School in Vermont and shows how this model can be replicated in other schools.

Learning from the past...preparing for the future: a thematic multi-age teaching resource on dinosaurs focussing on the development of student abilities in thinking and doing.
Edmonton, AB: Capital City Events Foundation, 1993.

Multi-age and more: building connections.
Politano, Colleen; Davies, Anne
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Kasten, Wendy C.; Clarke, Barbara K.
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A room with a different view: a practical framework for learning in a multi-age classroom.
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Grant, Jim and Richardson, Irv.
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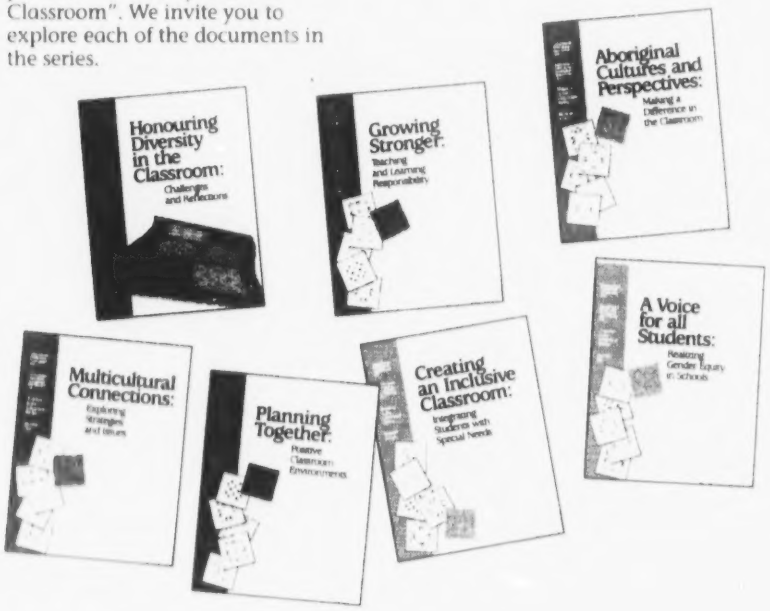

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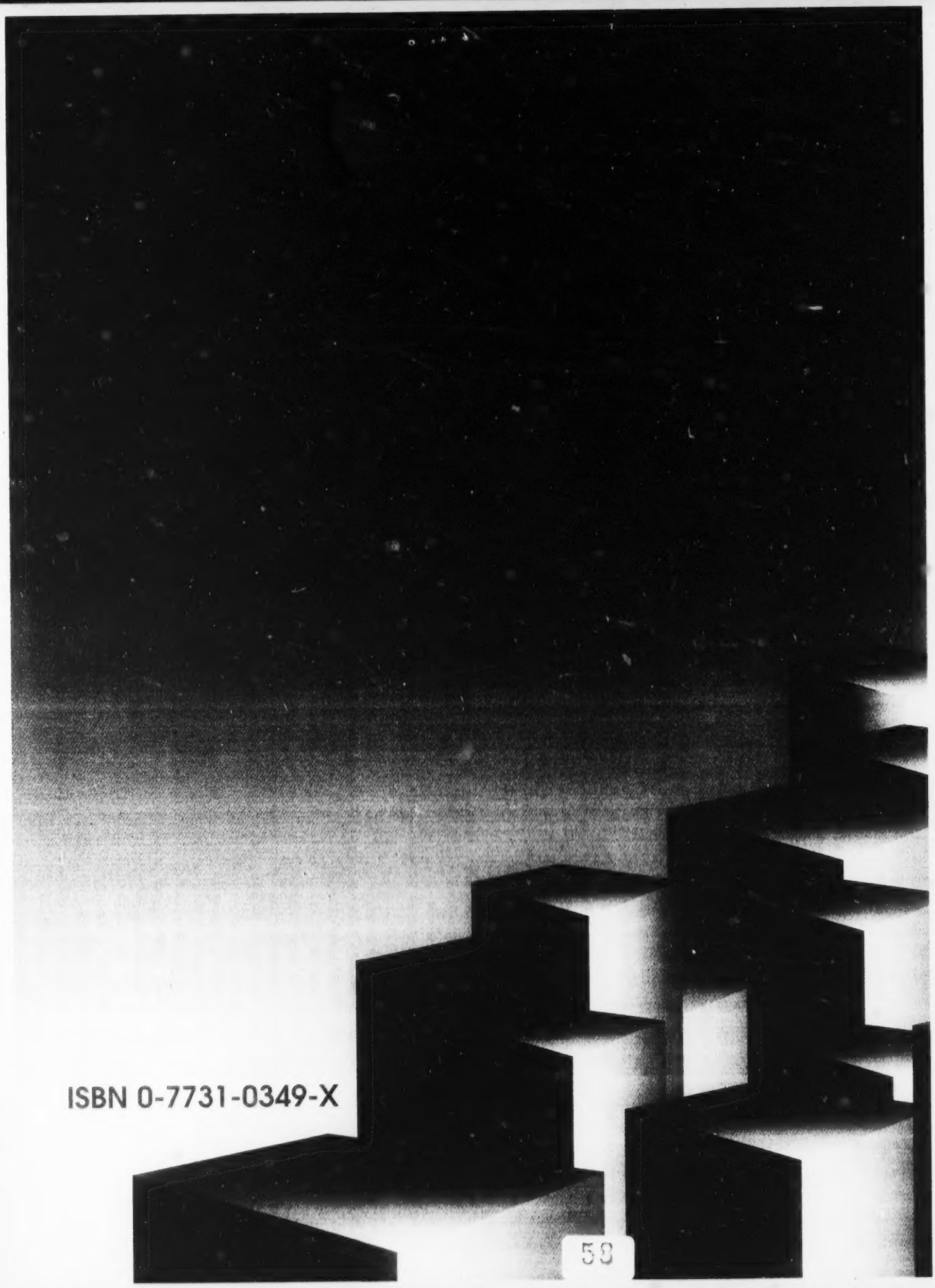

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